

400 KAR 4:140. Wild rivers change of use permit standards.

RELATES TO: KRS 146.220, 146.270, 146.280, 146.290, 146.350, 146.990, 151.140

STATUTORY AUTHORITY: KRS 146.270, 151.125, 224.01-110, 224.10-100

NECESSITY, FUNCTION, AND CONFORMITY: KRS 146.270 authorizes the secretary to promulgate and administrative regulations as necessary for the preservation and enhancement of wild rivers as established in KRS 146.250 and for control of recreational, educational, scientific, and other uses of these areas in a manner that shall not impair them. Under the provisions of KRS 146.290, the select cutting of timber, other resource removal, or an agricultural use may be allowed pursuant to administrative regulations promulgated by the secretary upon the granting of a permit under the other provisions of KRS 146.200 through 146.360. KRS 146.290 requires that any permit granted to conduct a change of use shall contain restrictions, terms, and conditions as appropriate to protect to the fullest extent possible the stream area and the public trust therein within the intent of KRS 146.220. This administrative regulation establishes minimum performance standards for conducting a land use change in a wild river corridor as necessary to protect the scenic beauty and environmental quality.

Section 1. Applicability. This administrative regulation applies to new land uses, as defined by 400 KAR 4:110, within designated boundaries of a wild river corridor that require a change of use permit from the office. Nothing herein shall be construed as superseding any requirements of other office programs or of other state or federal agencies.

Section 2. Buffer Zones.

(1) Other than as necessary to provide river access sites authorized by the office, a change of land use shall be located outside of buffer zones.

(2) If the adjacent slope is less than forty (40) percent the minimum width of a buffer zone bordering streams and other surface waters shall be 100 feet as measured laterally from the bank of the stream or other surface water. If the adjacent slope is forty (40) degrees or greater, the buffer zone width shall vary as established in the Table in this subsection.

Slope of Land (percent)	Minimum Width of Buffer Zone (feet)
40 to 49	115
50 to 59	125
60 to 69	145
70 to 79	165

(3) The boundaries of a buffer zone shall be flagged by the permittee with durable, brightly-colored material prior to the commencement of a permitted change of use.

Section 3. Extent of Disturbance. A new land use shall occupy the minimum area necessary to accomplish the intended use as specified in an approved land use plan.

Section 4. Water Quality.

(1) In accordance with the nondegradation provision for outstanding resource waters established in 400 KAR 5:029(2)(4), background water quality of surface waters within a wild river corridor shall be maintained or enhanced.

(2) Any new discharge of a substance or combination of substances into a surface water within a wild river corridor shall maintain or enhance background water quality in the receiving stream.

(3) Water quality data to include assessment of the presence of aquatic species and habitat

quality, shall be collected as necessary to document maintenance of background water quality.

(4) The natural flow of water in wild rivers shall be maintained. Water withdrawals shall require a permit as established in 400 KAR 4:010 and KRS 151.140, and shall not be allowed to impair existing recreational or fish and wildlife uses of the river, nor adversely impact endangered or threatened species.

Section 5. Erosion Control.

(1) Best management practices shall be implemented as necessary to control soil erosion and sediment if there is ground surface disturbance. Sediment shall not be allowed to accumulate in surface waters.

(2) Temporary erosion control measures shall be immediately implemented on all disturbed areas not needed for ongoing operation until permanent control measures can be established, and shall minimally include use of one (1) or more of the erosion control measures established in paragraphs (a) through (c) of this subsection.

(a) All disturbed surfaces shall be graded, seeded, fertilized, and mulched to establish complete vegetative ground cover. Native species of grasses and legumes shall be used if conditions allow.

(b) Sediment ponds and filters, such as baled vegetation, shall be used as necessary to trap sediment within disturbed areas. Filter fences may be used in situations in which other methods might not provide adequate control.

(c) On slopes of ten (10) percent or more, diversion structures shall be installed uphill of disturbed areas as needed to divert surface run-off into vegetated areas.

(3) Vehicular traffic shall be restricted to the access roads and skid trails approved in the land use plan.

(4) Activities involving the use of heavy equipment shall be suspended during wet soil conditions, and heavy equipment shall be stored outside the corridor when not in use.

(5) During construction activities, storage and disposal of unconsolidated materials shall occur only at locations approved in the land use plan, and topsoil removed from the operation site shall be stockpiled and stabilized for use during reclamation.

(6) Intermittent streams that are tributaries of a wild river may be temporarily impounded or otherwise altered to effect a permitted use. Streambed materials shall not be moved or removed from the streambed of a permanent or intermittent stream for any purpose.

Section 6. Stream Crossings.

(1) Vehicular stream crossings shall be prohibited where stream bank slopes exceed ten (10) percent, or where the crossing might otherwise have an adverse impact on the stream environment.

(2) Natural drainages not composed substantially of rock shall be accommodated with an appropriately sized drainage relief structure, such as a culvert or temporary bridge, at the point of intersection with a road.

(a) Stream crossings shall occur only at right angles where the stream channel is most narrow and has firm, rocky banks.

(b) Relief structures for crossing a permanent stream shall minimally consist of a closed culvert designed to handle a ten (10) year, twenty-four (24) hour precipitation event, and shall be embedded in clean rock fill and covered by compacted fill to a minimum depth of one (1) foot. The bottom of culverts shall be flush with stream substrates.

(3) As required pursuant to KRS 151.250, a Division of Water permit to authorize construction in a flood plain shall be obtained from the office prior to bridge construction if the area of the watershed is one (1) square mile or greater.

Section 7. Access Roads.

- (1) Existing roads shall be used if possible to minimize surface disturbance.
- (2) Best management practices for road construction, incorporated by reference in the U.S. Army Corps of Engineers Nationwide Permit for Linear Transportation, shall be employed to the greatest extent possible during road construction and maintenance.
- (3) Roads shall be routed to follow the existing land contour as closely as possible and to avoid surface waters, flood plains, and any areas vital to the preservation of significant features. Except for necessary stream crossings or provision of public access to the river, no portion of any road shall be located in a buffer zone or streambed.
- (4) Roads shall not exceed a maximum grade of ten (10) percent for distances of more than 150 feet. Portions of roads on grades steeper than ten (10) percent shall be graded and surfaced with stable materials such as limestone rock, crushed gravel, or other material approved in the land use plan, and shall be sufficiently durable for the anticipated volume of traffic and the size, weight, and speed of vehicles to be used. Acid or toxin-forming substances shall not be used for road surfacing.
- (5) The width of a road shall be appropriate for the anticipated volume of traffic and the size, weight, and speed of vehicles to be used and shall not exceed sixteen (16) feet for single-lane traffic.
- (6) Vegetation shall not be cleared from an area greater than the width necessary for road and associated ditch construction. Road shoulders shall be seeded in grass cover immediately after construction is completed, and ditches shall be lined with gravel.
- (7) Roads constructed to effect a permitted use shall be closed by means of a locked gate located at or near the corridor boundary when adverse weather or other conditions cause operation and maintenance of the permitted use to be suspended for an extended period of time.

Section 8. Structures.

- (1) Structures permitted by the management agency shall be located either:
 - (a) Beyond the limit of the 100-year flood plain as determined by the office; or
 - (b) No closer than 250 feet from the nearer bank of the wild river.
- (2) Structures shall be screened by vegetation or topographic features so as not to be visible from the nearer bank of the wild river.
- (3) Any new dock, boat ramp, or other river access facility shall be constructed so as to minimize its intrusion into the river, if any, and shall not substantially impede natural stream flow.
- (4) Best management practices for construction shall be used as necessary to control erosion and prevent sedimentation of surface waters.

Section 9. Control of Hazardous Substances.

- (1) To the extent not inconsistent with any other applicable law, any hazardous substance used for or resulting from a new land use shall be confined to the smallest practicable area, shall be stored so as to prevent escape as a result of rain, percolation, high water, or other cause, and shall be properly and legally disposed of outside of the wild river corridor.
- (2) The operator shall immediately notify the office of any accident involving fire, personal injury, discharge, or accidental bypass of any hazardous substance within a wild river corridor, and shall submit to the office a written report containing details of the accident to include a map of the area impacted and a description of the people, property, and substances involved within forty-eight (48) hours of an accident event.

Section 10. Solid Waste Disposal. Scrap and waste materials used to effect a new land use

shall be removed and properly disposed of, in accordance with local solid waste ordinances and 401 KAR Chapters 47 through 49, outside of the corridor immediately after their use is concluded.

Section 11. Visibility. Buildings, facilities, and other structures shall be made as inconspicuous as possible by painting or staining in muted tones or by screening with native vegetation. Electric lines shall not be strung across a wild river unless no other option is available, and shall be hidden to the extent possible.

Section 12. Cutting of Vegetation.

(1) Any tree cutting required for a new land use, other than the permitted select cutting of timber or a new agricultural use, shall be limited to trees that interfere with the construction or operation of the permitted use, as approved in the land use plan.

(2) Burning of forest vegetation shall be prohibited unless authorized by the Division of Forestry, or the U.S. Forest Service on federal lands, for purposes of disease control or as part of a prescribed burn and shall conform with other applicable provisions of law.

(3) Every effort shall be made to avoid unnecessary removal or trampling of vegetation within a corridor.

Section 13. Operation and Maintenance. All operation and erosion control structures and facilities shall be routinely inspected and maintained by the operator to ensure proper functioning and to prevent the accumulation or accidental discharge of hazardous substances or waste materials.

Section 14. Reclamation.

(1) The permittee shall provide written notification to the office immediately upon the conclusion of a new land use and shall begin implementing reclamation measures within thirty (30) days following notifications.

(2) Reclamation shall involve restoration of all disturbed area to its predisturbance appearance and condition or an improved condition that shall enhance natural and aesthetic values.

(3) Reclamation shall be completed within ninety (90) days following conclusion of the new use unless an exception is approved by the office, including a written request based on conditions beyond the applicant's control before the ninety (90) day period ends.

(4) All facilities and structures installed for the new use, including temporary erosion control and drainage structures, shall be removed from the corridor, and the natural contours and drainage patterns shall be restored. Culverts and other relief structures may remain if approved by the office to protect the natural and aesthetic values of an area.

(5) Unless otherwise approved in the land use plan, roads constructed for the permitted use shall be reclaimed by effectively blocking the road entrance to vehicular use, removing water control devices, restoring the ground surface to its natural contours, and seeding, fertilizing, and mulching the roadbed. Native species of plants approved in the land use plan shall be used if conditions allow, and those having wildlife value shall be preferred.

(6) Tree species that existed on the site prior to the land use change shall be planted on all areas cleared of trees during the land use change.

(7) Reclamation shall be considered complete if an inspection by office personnel determines that the affected site resembles, as closely as possible, the condition and appearance of the land and vegetation that existed prior to the land use change.

(8) Failure of the operator to comply with these standards shall be cause for the denial of any future permit to conduct a change of use on land within a wild river corridor involving the

operator.

Section 15. Additional Standards Specific to Exploration For and Extraction Of Oil and Gas.

(1) A spill prevention and control countermeasure (SPCC) plan shall be prepared in accordance with 40 C.F.R. Part 112 and implemented before drilling begins. The SPCC plan shall contain a contingency plan for reporting and controlling accidental discharges according to 400 KAR 5:015.

(2) The area of disturbance at each well shall not exceed sixty (60) feet by 100 feet unless otherwise approved in the land use plan.

(3) Prior to drilling, an area forty (40) feet in diameter centered around each well shall be isolated by an earthen dike twelve (12) inches or more in height, and the enclosed ground surface shall be lined with three (3) inches or more of sorbent material.

(4) Acids and other well drilling and cleaning fluids shall be handled in accordance with Section 9 of this administrative regulation.

(5) Blowout prevention equipment shall be installed on wells during drilling.

(6) The permittee shall provide written notification to the office of the planned dates for drilling to provide an opportunity for office personnel to be present on-site during drilling activities.

(7) For air rotary or other dry methods of drilling, dust and other particulate matter blown from the well shall be directed away from surface waters and stockpiled in a manner that shall prevent its entry into surface waters as a result of rain, percolation, wind, or other cause. Dust may be controlled by injecting water into the air stream at a rate of approximately three (3) gallons per minute. Water and other fluids used in the drilling process shall not be discharged into surface waters.

(8) If drilling or production is suspended for twenty-four (24) hours or longer, all valves and blowout prevention equipment shall be closed.

(9) Storage or loadout tanks shall be equipped with an oil brine separator and a safety valve to prevent accidental overflow of oil, and all valves and other fluid controls shall be kept locked or be removed when the operator is off-site to prevent accidents due to vandalism.

(10) Produced water shall not be discharged into surface or groundwaters within a wild river corridor.

(11) Storage of produced water within a wild river corridor shall be in a closed tank having a minimum thirty (30) day storage capacity to prevent accidental discharge. Fluids shall be safely removed from the tank when the tank becomes filled to no more than two-thirds (2/3) capacity and be properly disposed of in accordance with 401 KAR 5:090.

(12) Pits constructed to temporarily hold brine or other fluids produced during drilling shall be located beyond flood plains and other areas prone to flooding, and be constructed according to 401 KAR 5:090, Section 9(5)(a).

(13) Disposal of produced water shall be by reinjection into a disposal well in accordance with 401 KAR 5:090, Section 11, and require an underground injection control permit as provided for in 40 C.F.R. 146, or shall be transported outside of the corridor and reinjected into an approved disposal well.

(14) Any pipelines leading from pumps to storage or loadout tanks shall be fitted within a second pipe or within an open culvert lined with nonpermeable material that shall act as a catch basin for any accidental discharge of oil or brine.

(15) Pipelines shall be placed as far away as possible from streams and other surface waters, shall follow an access road if possible, and shall not be routed across a wild river.

(16) Facilities, roads, collecting lines, and other structures shall be inspected daily by the operator when wells are producing to ensure erosion control and prevent accumulations or leaks of oil, produced water, or other hazardous substances.

(17) Spills or leaks of oil, produced water, or drilling or cleaning fluids shall be contained by the operator immediately upon discovery, be disposed of outside of the corridor in an approved manner within twenty-four (24) hours of discovery, and be reported to the office in accordance with 401 KAR 5:015 and 40 C.F.R. Part 110.

(18) The operator shall keep sorbent material, fire extinguishers, and other firefighting tools readily accessible on the site to control fire or an accidental discharge of oil or produced water.

(19) Trailers, mobile homes, or other temporary or permanent structures used to house operation personnel shall not be installed within a wild river corridor.

(20) Reclamation shall include the plugging of all wells in accordance with 805 KAR 1:060, and the plugging affidavit shall be submitted to the office.

Section 16. Additional Standards Specific to Underground Mining.

(1) Surface disturbance resulting from underground mining shall not occur within the buffer zones of streams and other surface waters within a wild river corridor.

(2) Drainage from any surface disturbance resulting from underground mining shall be controlled pursuant to 405 KAR 18:060 and 18:070.

(3) Mine surface entrances shall be located outside a wild river corridor if possible.

(4) Underground mining shall not be permitted if subsidence or landslide cannot be adequately controlled. If subsidence or surface displacement of soil, rock, or other ground material due to mining activities causes an adverse impact to the river or other surface waters within a wild river corridor, the mining operation shall be suspended until the operator has corrected the damage and provided evidence that further subsidence or landslide shall not occur.

(5) A subsidence event shall be reported to the office within twenty-four (24) hours of discovery, the surface impacts of subsidence shall be corrected, and the area restored to its previous condition before mining commences. The disturbed area shall be revegetated, using native grasses and legumes if conditions allow, and be thoroughly mulched with straw or other suitable material until a vegetative cover becomes established.

(6) In addition to the standards established in this administrative regulation, any roads constructed or improved to effect a mining use shall be in accordance with 405 KAR 18:230, and shall be constructed and maintained using best management practices for mining haul roads. Other transportation systems such as tramways, railroad loops, or spurs shall not be allowed within a wild river corridor unless access would cause less impact on the river environment than any alternative system.

(7) Underground development waste, spoil, coal, or other hazardous substances shall be transported to proper storage and disposal areas outside of the wild river corridor and shall otherwise be handled according to 405 KAR 18:130 and 405 KAR 18:190. Tipples, processing, or refuse areas shall not be located within a wild river corridor.

(8) Mine shafts shall not be routed beneath streams and other surface waters in order to avoid subsidence and physical damage to natural surface drainage patterns.

Section 17. Additional Standards Specific to the Selective Cutting of Timber.

(1) Timber cutting shall follow best management practices required pursuant to the Kentucky Forest Conservation Act, KRS 149.342-.344, and the Kentucky Agriculture Water Quality Act, KRS. 224.71-100 through 224.71-140, and related practices found in the most current revision of the Kentucky Agriculture Water Quality Plan available from the Kentucky Division of Conservation 300 Sower Boulevard, Frankfort, Kentucky 40601.

(2) A professional forester shall survey and mark all trees to be cut. A minimum residual basal area of not less than sixty (60) square feet per acre shall be left standing and evenly distributed over the harvested area.

- (3) The boundaries of the area to be cut shall be clearly marked using paint.
- (4) Prior to cutting, all active den trees and at least three (3) mast-producing trees per acre consisting of trees in the largest size class in the stand, shall be marked and left standing.
- (5) Tree cutting shall not be repeated in the permitted area at intervals of less than twenty (20) years from the date that reclamation is completed as established in Section 14(7) of this administrative regulation, unless the landowner has submitted a timber management plan as part of the land use plan, approved by a professional forester, which recommends a shorter interval.
- (6) The selective cutting of trees shall be prohibited within buffer zones except to remove diseased or insect-infested trees or those becoming uprooted due to natural causes.
- (7) Construction of roads and skid trails shall occur outside of buffer zones, unless less impact would result from using an existing road in a buffer zone and be routed to follow the contours of the land.
- (8) Trees used for fastening or attaching cables, guys, or other equipment shall be adequately protected from possibly injury.
- (9) In hilly terrain, logs shall be skidded uphill if possible, on trails designed and maintained for this purpose using best management practices, and shall not be skidded through surface waters.
- (10) The amount of surface disturbance required for construction of roads, skid trails, and log landings shall be kept to the minimum required for these purposes, and the area of a landing shall not exceed 6,000 feet unless an exception is approved in the land use plan.
- (11) Log landings shall be located so as to minimize erosion and if possible be located on well-drained sites on slopes of less than ten (10) percent. If necessary, a landing shall be protected from overland flow of water by construction of a diversion ditch on the uphill side to divert water into well-vegetated areas.
- (12) Timber shall be cut as close to the ground as is reasonably practicable, with the height of the stumps not to exceed twelve (12) inches above ground on the uphill side of the tree.
- (13) Trees shall be cut so as to fall away from streams and other surface waters, rock houses, historic structures, and other sensitive areas identified by the office.
- (14) Tree tops and other nonmarketable timber slash shall be lopped to within two (2) feet of the ground surface, or chipped and spread on disturbed areas to control erosion. Slash shall be randomly placed within a corridor.
- (15) Pesticides and herbicides shall be used in accordance with the land use plan submitted as part of the permit application incorporated by reference in 400 KAR 4:130.
- (16) Facilities for processing logs shall be located outside wild river corridor boundaries.
- (17) Logging operations shall cease during wet soil conditions.
- (18) At the conclusion of the land use change, log landings, skid trails, and haul roads shall be reclaimed according to Section 14 of this administrative regulation.
- (19) A permit to conduct select cutting of timber shall not be extended more than 180 days beyond the original permit expiration date.

Section 18. Additional Standards Specific to Agriculture.

- (1) A new agricultural use within a wild river corridor shall follow the Kentucky Agriculture Water Quality Act, KRS. 224.71-100 through 224.71-140, and related practices found in the most current revision of the Kentucky Agriculture Water Quality Plan available from the Kentucky Division of Conservation 300 Sower Boulevard, Frankfort, Kentucky 40601.
- (2) The removal of trees to effect a new agricultural use shall be subject to all applicable provisions of Section 17 of this administrative regulation.
- (3) Where little or no vegetative ground cover exists between the proposed agricultural use

and a stream or wetland, native trees and ground cover shall be planted along the banks of the surface water to create buffer zones prior to the commencement of the agricultural use. Plant species shall be recommended by the office.

(4) Severely eroded, sediment-producing areas shall be properly stabilized using best management practices for critical areas prior to the commencement of a new agricultural use in an area.

(5) Conservation tillage methods shall be employed to the extent practicable on lands having slopes of ten (10) degrees or greater.

(6) A cover crop shall be planted in cultivated fields during winter and other periods when the cultivated crop does not provide adequate ground cover.

(7) Livestock shall be excluded from buffer zones by fencing or other methods.

(8) Watering areas for livestock shall be located outside of buffer zones.

(9) The number of livestock per area of pasture shall be estimated in the land use plan and shall be maintained at or below the level necessary to sustain complete ground cover.

(10) Animal wastes shall be stored and disposed of in a manner that will prevent their introduction into streams. Spreading of waste over fields as a disposal method shall be avoided during periods of heavy rainfall or frozen soil conditions.

(11) Any pond constructed to hold animal waste shall be located as far away as possible from streams and other surface waters, and be designed to hold the run-off from a twenty-five (25) year, twenty-four (24) hour storm event plus six (6) months of precipitation.

(12) A perennial cover crop shall be planted between trees in orchards and nurseries immediately after the nursery stock is planted.

(13) The use of pesticides and herbicides shall be restricted to those approved in the land use plan, and the use of a persistent, toxic substance shall not be approved if an equally effective, less toxic and less persistent product is available.

(14) Aerial spraying of chemicals shall not be allowed within a wild river corridor.

(15) The office may attach additional standards to a permit authorizing an agricultural use on highly erodible lands.

Section 19. Additional Standards for Recreation Facilities Development.

(1) Development of commercial or private recreational facilities within a wild river corridor shall be consistent with wild river management plans, and buildings and other structures shall be located outside of buffer zones if possible.

(2) Recreation facilities shall be primitive in design and appearance and constructed of natural or natural-appearing materials that blend with the surroundings.

(3) Recreation facilities shall be designed so as to require minimal ground disturbance and removal of vegetation. (15 Ky.R. 706; 1000; eff. 10-26-1988; TAm eff. 11-25-2008; TAm eff. 7-8-2016; Recodified from 401 KAR 4:140, TAm 12-21-2017; 45 Ky.R. 1799, 2617; eff. 4-5-2019.)